

ABSTRACT

The present invention provides an angular velocity sensor that can diagnose abnormalities without having on a tuning fork vibrator special abnormality diagnostic signal input electrodes or reference potential ground electrodes to reduce errors in detecting angular velocity. Switches (45) and (48) are used to generate drive signals of the same phase at output terminals (49) and (50), thereby bending arms (2) and (3) in the Z-axis direction of tuning fork vibrator 1. The electric charges generated from tenth electrode (22) and 12th electrode (25) formed respectively on arms (2) and (3) are amplified respectively at first amplifier (62) and second amplifier (63). The outputs of these amplifiers are inputted to differential amplifier (64), whose output is compared by comparator (81) with a prescribed value generated by reference value generator (82). When the output exceeds the prescribed value, comparator (81) determines an abnormality.

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